

Conference Topics Addressed:

- 1 Advanced image processing
- 2 Image mapping

ASF SAR PROCESSING SYSTEM PERFORMANCE OVERVIEW

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The Alaska SAR Facility (ASF) located at the University of Alaska Fairbanks (UAF) has been serving as one of the data reception, processing, and archive facility for the polar orbiting synthetic aperture radar (SAR) missions of ERS-1 and JERS. Since late 1994, its SAR Processing System (SPS) has been undergoing an extensive upgrade effort in equipping itself to accommodate the ERS-2 and Radarsat missions as well. The first phase of the SPS upgrade effort is scheduled to complete in time in October 1995 to participate in Radarsat data validation and commissioning activities at ASF. The second phase of the upgrade is targeted for completion in March 1996 to fully support data processing operations for Radarsat in addition to the on-going ERS and JERS.

This paper focuses on the performance of the ASF SPS in terms of system throughput, image quality, and system operability and reliability amongst other attributes. System performance data obtained from system acceptance testing using simulated data, CSA provided test data sets, and SIR-C experimental ScanSAR data will be compared against system requirements. In addition, actual Radarsat data processing performance will be reported based on the Radarsat data validation and commissioning activities conducted at ASF in the October/November 1995 time frame.